

CLAIMS:

1. A method of reducing ringing artifacts in a compressed digital video signal, the method comprising:
decoding the coded video signal;
determining plurality of metric values in a region near at least one pixel, wherein the metric values are greater than a particular value; and
applying a deringing method to substantially reduce ringing artifacts near the pixel.
2. A method as recited in claim 1, wherein the pixel is near or at an edge of an image of a frame.
3. A method as recited in claim 2, wherein the plurality of metric values is for pixels near a strong edge of the image.
4. A method as recited in claim 1, wherein the metric values are UMDVP values.
5. A method as recited in claim 4, wherein artifacts are localized for deringing by counting the number of UMDVP values greater than the particular value in a window around a pixel that is to be deringed.
6. A method as recited in claim 5, wherein the number of UMDVP values greater than the particular value is compared to a threshold value that is proportional to a size of the window.
7. A method as recited in claim 6, wherein the method is repeated for a plurality of regions in the frame.
8. A method as recited in claim 6, further comprising deringing a luminance component of the decoded video signal.

9. A method as recited in claim 6, further comprising deringing a chrominance component of the decoded video signal.
10. A method as recited in claim 8, further comprising, after the deringing, updating metric data of a post-processed signal.
11. A method as recited in claim 9, further comprising, after the deringing, updating metric data of a post-processed signal.
12. A method of reducing ringing artifacts in a compressed digital video signal, the method comprising:
determining an average of a metric from a plurality of metric values in selected regions of a frame; and
applying a deringing method if the average metric in one of the selected regions is above a threshold.
13. A method as recited in claim 12, further comprising decoding the digital video signal, before determining the average.
14. A method as recited in claim 12, further comprising deringing a luminance component of the decoded video signal.
15. A method as recited in claim 12, further comprising deringing a chrominance component of the decoded video signal.
16. An apparatus for selectively deringing a compressed digital video signal, comprising:
a decoding module;
a metric calculation module; and
a metric-controlled deringing module, wherein the deringing module reduces ringing artifacts in certain regions of a video frame based on data from the metric calculation device.

17. An apparatus as recited in claim 16, wherein the metric-controlled deringing module updates metric data of the frame based on the deringing.
18. A method as recited in claim 16, wherein the metric is a UMDVP metric.
19. An apparatus as recited in claim 16, wherein the deringing module substantially reduces or eliminates ringing artifacts in selected regions of a frame.
20. An apparatus as recited in claim 16, wherein the deringing module substantially reduces or eliminates ringing artifacts in a frame.